

Notice of Allowability

Application No.

10/023,022

Examiner

Chester T. Barry

Applicant(s)

SMITH ET AL.

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/27/04.
2. ☒ The allowed claim(s) is/are 42.
3. ☒ The drawings filed on 17 December 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 3/1/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

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571-272-1152 direct
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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. Authorization for this examiner's amendment was given in a telephone interview with Ed Gamson on 7/30/04.

The application has been amended as follows:

IN THE CLAIMS

Claims 43 - 55 were cancelled.

Claim 42 is allowed.

The following is an examiner's statement of reasons for allowance: Liu describes particulate alumina containing meta-periodate ions. There is no reason to suspect that they are not "substantially homogeneously sorbed throughout the particles." The meta-periodate ions are **not** present in an amount of about 0.1 to about 0.15 molar in a gravity-settled volume of particles in deionized water, as required by claim 42. The concentration of the meta-periodate reported by Liu is "3 mmol on 1 g of alumina." Assuming a bulk density of about 0.5 g / ml,¹ this concentration is equivalent to about 1.5 molar.² The art does not suggest decreasing the oxidant concentration of the Liu particles by an

¹ http://www.vgdllc.com/EM_Column_Chromatography.htm reports a bulk density for acidic aluminum oxide 90 particles larger than about 40 microns of about 0.5 g/ml. Liu's particles are 100 - 320 mesh, i.e., larger than 40 microns.

²
$$\frac{3 \text{ mmol}}{1 \text{ g}} \times \frac{0.5 \text{ g}}{\text{ml}} = \frac{0.0015 \text{ mol}}{0.001 \text{ L}} = 1.5 \text{ molar}$$

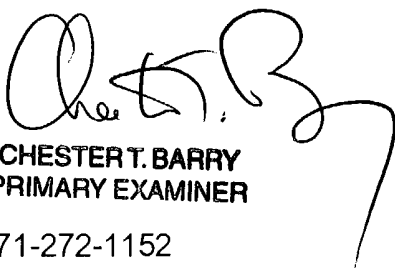
1 g ml 0.001 L

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order of magnitude, i.e., by the amount necessary for the meta-periodate concentration on the alumina to fall within the recited range of 0.1 to 0.15 molar.

Austin is cited for disclosure of an oxidizing agent supported on an inert carrier, e.g., "sodium metaperiodate on alumina" (col 3 line 30). Moffatt is cited for its description of "sodium metaperiodate previously fixed to acidic alumina" (col 1 line 28).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."



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PRIMARY EXAMINER
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